

CMLD4448DO
CMLD4448DOG

**SURFACE MOUNT SILICON
DUAL, ISOLATED, OPPOSING
HIGH SPEED
SWITCHING DIODES**



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLD4448DO and CMLD4448DOG each contain two (2) isolated opposing configuration, silicon switching diodes, manufactured by the epitaxial planar process, epoxy molded in an SOT-563 surface mount package. These devices are designed for high speed switching applications.

MARKING CODES:

CMLD4448DO: C40

CMLD4448DOG: 4CG



• The CMLD4448DOG is **Halogen Free** by design

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Peak Repetitive Reverse Voltage	V_{RRM}	120	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	500	mA
Peak Forward Surge Current, $t_p=1.0\mu\text{s}$	I_{FSM}	4.0	A
Peak Forward Surge Current, $t_p=1.0\text{s}$	I_{FSM}	1.0	A
Power Dissipation	P_D	250	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	500	$^\circ\text{C/W}$

SYMBOL

UNITS

ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=50\text{V}$			300	nA
I_R	$V_R=50\text{V}, T_A=125^\circ\text{C}$			100	μA
I_R	$V_R=100\text{V}$			500	nA
BV_R	$I_R=100\mu\text{A}$	120	150		V
V_F	$I_F=1.0\text{mA}$	0.55	0.59	0.65	V
V_F	$I_F=10\text{mA}$	0.67	0.72	0.77	V
V_F	$I_F=100\text{mA}$	0.85	0.91	1.0	V
C_J	$V_R=0, f=1.0\text{MHz}$			1.5	pF
t_{rr}	$I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$		2.0	4.0	ns